



COLORADO

**Department of
Regulatory Agencies**

**2014 Sunset Review:
Pesticide Applicators' Act**

*Office of Policy, Research and Regulatory Reform
October 15, 2014*



COLORADO

**Department of
Regulatory Agencies**

Executive Director's Office

October 15, 2014

Members of the Colorado General Assembly
c/o the Office of Legislative Legal Services
State Capitol Building
Denver, Colorado 80203

Dear Members of the General Assembly:

The mission of the Department of Regulatory Agencies (DORA) is consumer protection. As a part of the Executive Director's Office within DORA, the Office of Policy, Research and Regulatory Reform seeks to fulfill its statutorily mandated responsibility to conduct sunset reviews with a focus on protecting the health, safety and welfare of all Coloradans.

DORA has completed the evaluation of the Pesticide Applicators' Act. I am pleased to submit this written report, which will be the basis for my office's oral testimony before the 2015 legislative committee of reference. The report is submitted pursuant to section 24-34-104(8)(a), of the Colorado Revised Statutes (C.R.S.), which states in part:

The department of regulatory agencies shall conduct an analysis of the performance of each division, board or agency or each function scheduled for termination under this section...

The department of regulatory agencies shall submit a report and supporting materials to the office of legislative legal services no later than October 15 of the year preceding the date established for termination....

The report discusses the question of whether there is a need for the regulation provided under Article 10 of Title 35, C.R.S. The report also discusses the effectiveness of the Commissioner of Agriculture and staff in carrying out the intent of the statutes and makes recommendations for statutory and administrative changes in the event this regulatory program is continued by the General Assembly.

Sincerely,

Barbara J. Kelley
Executive Director





COLORADO

Department of Regulatory Agencies

2014 Sunset Review Pesticide Applicators' Act

SUMMARY

What Is Regulated?

The Commissioner of Agriculture (Commissioner) regulates businesses and individuals who apply pesticides and use devices that trap, destroy, repel, or mitigate pests. There are two basic types of pesticides: restricted use and general use. All individuals and businesses that apply restricted use pesticides are regulated by the Pesticide Applicator's Act (Act) and only individuals and businesses who apply general use pesticides as a commercial endeavor are regulated by the Act.

Why Is It Regulated?

Because pesticides used to control insects, rodents, weeds, and other forms of life contain toxic substances which may pose a serious risk to the public health and safety, the regulation of pesticide applicators is necessary to prevent adverse effects to both individuals and the environment.

Who Is Regulated?

During fiscal year 12-13 there were 1,062 Commercial Applicator businesses, 33 Limited Commercial Applicators, 99 Public Applicators, and 4,730 Private Applicators licensed in Colorado. These entities employed thousands of Qualified Supervisors, Certified Operators, and Technicians, all of whom must undergo some training before applying pesticides.

How Is It Regulated?

The program defines three different pesticide application license classifications, including Agricultural, Ornamental, and Structural. Each of the classifications has multiple subclassifications. The Commissioner regulates Commercial, Limited Commercial, Public, and Private pesticide applicators. The level of regulation is dependent on multiple factors including the type of pesticide being applied and the physical and economic environments in which it is applied.

What Does It Cost?

The program is funded through U.S. Environmental Protection Agency (EPA) grants and by a cash fund established from fees and fines assessed under the Act. During fiscal year 12-13, the program expended \$358,098 in EPA grants, \$1,183,779 in cash funds, and allotted 12.5 full-time equivalent employees to administration.

What Disciplinary Activity Is There?

During fiscal year 12-13, the program issued 32 disciplinary actions which included 13 fines that totaled \$22,400.

KEY RECOMMENDATIONS

Continue the Act for nine years, until 2024.

A considerable risk exists to public health, safety and welfare without regulation of pesticide applicators. The dangers of pesticides being misapplied by untrained, unsupervised individuals are substantial. Misapplied pesticides can be unsafe. These premises indicate that a strong regulatory program is needed to protect the public from exposure-related danger.

Require Limited Commercial applicators, and individuals who perform pesticide applications for Public Applicators, to acquire training in the core elements of pesticide use, established by the Commissioner, prior to applying general use pesticides.

Because pesticides contain toxic substances that can endanger the public, it is necessary to regulate the individuals that apply pesticides commercially. This is the case whether they apply restricted use pesticides or general use pesticides.

Presently no training is required of two classes of licensees, Limited Commercial and Public Applicators, when they apply general use pesticides because it is not a pure commercial transaction. However, when these licensees apply general use pesticides, there is often more public exposure than there is from commercial applications. Therefore, Limited Commercial and Public Applicators should be required to have at least minimal training.

MAJOR CONTACTS MADE DURING THIS REVIEW

Associated Landscape Contractors of Colorado
Coloradans for Responsible Pesticide Application
Colorado Association of School Boards
Colorado Association of Wheat Growers
Colorado Counties, Inc.
Colorado Department of Public Health and Environment
Colorado Municipal League
Colorado Pest Control Association
Colorado Pesticide Reform Coalition

Colorado Potato Administrative Committee
Colorado State Beekeepers Association
Colorado State University Extension Service
Rocky Mountain Agribusiness Association
Rocky Mountain Chapter Sierra Club
Green Industries of Colorado
GreenCO/Colorado Association of Lawn Care Professionals
Colorado Weed Management Association
Front Range Organic Gardeners

What is a Sunset Review?

A sunset review is a periodic assessment of state boards, programs, and functions to determine whether they should be continued by the legislature. Sunset reviews focus on creating the least restrictive form of regulation consistent with protecting the public. In formulating recommendations, sunset reviews consider the public's right to consistent, high quality professional or occupational services and the ability of businesses to exist and thrive in a competitive market, free from unnecessary regulation.

Sunset Reviews are prepared by:
Colorado Department of Regulatory Agencies
Office of Policy, Research and Regulatory Reform
1560 Broadway, Suite 1550, Denver, CO 80202
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Background

Introduction

Enacted in 1976, Colorado's sunset law was the first of its kind in the United States. A sunset provision repeals all or part of a law after a specific date, unless the legislature affirmatively acts to extend it. During the sunset review process, the Department of Regulatory Agencies (DORA) conducts a thorough evaluation of such programs based upon specific statutory criteria¹ and solicits diverse input from a broad spectrum of stakeholders including consumers, government agencies, public advocacy groups, and professional associations.

Sunset reviews are based on the following statutory criteria:

- Whether regulation by the agency is necessary to protect the public health, safety and welfare; whether the conditions which led to the initial regulation have changed; and whether other conditions have arisen which would warrant more, less or the same degree of regulation;
- If regulation is necessary, whether the existing statutes and regulations establish the least restrictive form of regulation consistent with the public interest, considering other available regulatory mechanisms and whether agency rules enhance the public interest and are within the scope of legislative intent;
- Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures and practices and any other circumstances, including budgetary, resource and personnel matters;
- Whether an analysis of agency operations indicates that the agency performs its statutory duties efficiently and effectively;
- Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates;
- The economic impact of regulation and, if national economic information is not available, whether the agency stimulates or restricts competition;
- Whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession;
- Whether the scope of practice of the regulated occupation contributes to the optimum utilization of personnel and whether entry requirements encourage affirmative action;

¹ Criteria may be found at § 24-34-104, C.R.S.

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- Whether the agency through its licensing or certification process imposes any disqualifications on applicants based on past criminal history and, if so, whether the disqualifications serve public safety or commercial or consumer protection interests. To assist in considering this factor, the analysis prepared pursuant to subparagraph (i) of paragraph (a) of subsection (8) of this section shall include data on the number of licenses or certifications that were denied, revoked, or suspended based on a disqualification and the basis for the disqualification; and
 - Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.

Types of Regulation

Consistent, flexible, and fair regulatory oversight assures consumers, professionals and businesses an equitable playing field. All Coloradans share a long-term, common interest in a fair marketplace where consumers are protected. Regulation, if done appropriately, should protect consumers. If consumers are not better protected and competition is hindered, then regulation may not be the answer.

As regulatory programs relate to individual professionals, such programs typically entail the establishment of minimum standards for initial entry and continued participation in a given profession or occupation. This serves to protect the public from incompetent practitioners. Similarly, such programs provide a vehicle for limiting or removing from practice those practitioners deemed to have harmed the public.

From a practitioner perspective, regulation can lead to increased prestige and higher income. Accordingly, regulatory programs are often championed by those who will be the subject of regulation.

On the other hand, by erecting barriers to entry into a given profession or occupation, even when justified, regulation can serve to restrict the supply of practitioners. This not only limits consumer choice, but can also lead to an increase in the cost of services.

There are also several levels of regulation.

Licensure

Licensure is the most restrictive form of regulation, yet it provides the greatest level of public protection. Licensing programs typically involve the completion of a prescribed educational program (usually college level or higher) and the passage of an examination that is designed to measure a minimal level of competency. These types of programs usually entail title protection - only those individuals who are properly licensed may use a particular title(s) - and practice exclusivity - only those individuals who are properly licensed may engage in the particular practice. While these requirements can be viewed as barriers to entry, they also afford the highest level of consumer protection in that they ensure that only those who are deemed competent may practice and the public is alerted to those who may practice by the title(s) used.

Certification

Certification programs offer a level of consumer protection similar to licensing programs, but the barriers to entry are generally lower. The required educational program may be more vocational in nature, but the required examination should still measure a minimal level of competency. Additionally, certification programs typically involve a non-governmental entity that establishes the training requirements and owns and administers the examination. State certification is made conditional upon the individual practitioner obtaining and maintaining the relevant private credential. These types of programs also usually entail title protection and practice exclusivity.

While the aforementioned requirements can still be viewed as barriers to entry, they afford a level of consumer protection that is lower than a licensing program. They ensure that only those who are deemed competent may practice and the public is alerted to those who may practice by the title(s) used.

Registration

Registration programs can serve to protect the public with minimal barriers to entry. A typical registration program involves an individual satisfying certain prescribed requirements - typically non-practice related items, such as insurance or the use of a disclosure form - and the state, in turn, placing that individual on the pertinent registry. These types of programs can entail title protection and practice exclusivity. Since the barriers to entry in registration programs are relatively low, registration programs are generally best suited to those professions and occupations where the risk of public harm is relatively low, but nevertheless present. In short, registration programs serve to notify the state of which individuals are engaging in the relevant practice and to notify the public of those who may practice by the title(s) used.

Title Protection

Finally, title protection programs represent one of the lowest levels of regulation. Only those who satisfy certain prescribed requirements may use the relevant prescribed title(s). Practitioners need not register or otherwise notify the state that they are engaging in the relevant practice, and practice exclusivity does not attach. In other words, anyone may engage in the particular practice, but only those who satisfy the prescribed requirements may use the enumerated title(s). This serves to indirectly ensure a minimal level of competency - depending upon the prescribed preconditions for use of the protected title(s) - and the public is alerted to the qualifications of those who may use the particular title(s).

Licensing, certification and registration programs also typically involve some kind of mechanism for removing individuals from practice when such individuals engage in enumerated proscribed activities. This is generally not the case with title protection programs.

Regulation of Businesses

Regulatory programs involving businesses are typically in place to enhance public safety, as with a salon or pharmacy. These programs also help to ensure financial solvency and reliability of continued service for consumers, such as with a public utility, a bank or an insurance company.

Activities can involve auditing of certain capital, bookkeeping and other recordkeeping requirements, such as filing quarterly financial statements with the regulator. Other programs may require onsite examinations of financial records, safety features or service records.

Although these programs are intended to enhance public protection and reliability of service for consumers, costs of compliance are a factor. These administrative costs, if too burdensome, may be passed on to consumers.

Sunset Process

Regulatory programs scheduled for sunset review receive a comprehensive analysis. The review includes a thorough dialogue with agency officials, representatives of the regulated profession and other stakeholders. Anyone can submit input on any upcoming sunrise or sunset review via DORA's website at: www.dora.colorado.gov/opr.

The regulatory functions of the Commissioner of Agriculture (Commissioner) and the Colorado Department of Agriculture (CDA) as enumerated in Article 10 of Title 35, Colorado Revised Statutes (C.R.S.), shall terminate on July 1, 2015, unless continued by the General Assembly. During the year prior to this date, it is the duty of DORA to conduct an analysis and evaluation of the administration of the Pesticide Applicators' Act pursuant to section 24-34-104, C.R.S.

The purpose of this review is to determine whether the currently prescribed regulation of pesticide applicators should be continued for the protection of the public and to evaluate the performance of the Commissioner. During this review, the Commissioner must demonstrate that the regulation serves to protect the public health, safety or welfare, and that the regulation is the least restrictive regulation consistent with protecting the public. DORA's findings and recommendations are submitted via this report to the Office of Legislative Legal Services.

Methodology

As part of this review, DORA staff attended Pesticide Advisory Committee meetings; interviewed CDA staff, U.S. Environmental Protection Agency (EPA) staff, officials with state professional associations, and members of Colorado and national interest groups; reviewed CDA records, including complaint and disciplinary actions; reviewed U.S. and Colorado statutes and Commissioner rules; and reviewed the laws of other states.

Profile of the Profession

The Act defines a pesticide as:

...any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; except that the term "pesticide" shall not include any article that is a "new animal drug" as designated by the United States food and drug administration.²

The development of organochlorine chemical pesticides after World War II resulted in widespread pesticide use. These pesticides were believed to be safe and were credited with increasing crop yields, protecting human health, and killing malaria-spreading mosquitoes. However, by the early 1950s, evidence showed that several organochlorine pesticides caused extensive kills of fish, frogs, birds, and bees. Given the harm caused to wildlife, concern grew that pesticides could also be harming people.³ The publication of Rachel Carson's book *Silent Spring*, in 1962, brought these concerns into the public consciousness and marked the beginning of the modern environmental movement. Worry that environmental contaminants, including pesticides, harm human health has increased since. When the EPA was created in 1970, it was charged with setting pesticide tolerances.⁴

The chief national law governing pesticides and pesticide application is the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Under the FIFRA umbrella, the EPA works with federal, state, and tribal regulatory partners to assure compliance with pesticide laws.⁵

² § 35-10-103(10), C.R.S.

³ Kristina Thayer, Jane Houlihan, (2004) "Pesticides, Human Health, and the Food Quality Protection Act." *William and Mary Environmental Law and Policy Review*, 28(2) p.257. Retrieved December 10, 2013, from <http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1151&context=wmelpr>

⁴ *ibid.* pp.257-258.

⁵ EPA. *Compliance Monitoring*. Retrieved December 10, 2013, from <http://www.epa.gov/compliance/monitoring/programs/fifra/index.html>

The EPA classifies pesticides into two categories: restricted use pesticides and general use pesticides. Restricted use pesticides may be applied only by or under the direct supervision of trained and certified applicators. Restricted use pesticides make up about one-quarter of total pesticides that are applied.⁶

Individuals applying pesticides must comply with federal laws as well as each individual state's laws concerning pesticide use and labeling. As with many federal regulatory programs, FIFRA cedes primary compliance, monitoring, and enforcement power to states. Typically, a state's department of agriculture has the primary responsibility⁷ and that is the case with Colorado.

The Commissioner licenses businesses and individuals who apply pesticides and use certain regulated devices that trap, destroy, repel, or mitigate pests. The licensing of those who apply pesticides aims at ensuring that the applicator is knowledgeable about how to make a pesticide application and the effects of the pesticides being applied.

According to the Pesticide Applicators' Act, a pest is:

...any insect, rodent, nematode, fungus, weed, or other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other microorganism (except viruses, bacteria, or other microorganisms on or in living man or in other living animals) which the Commissioner of Agriculture or the administrator of the Environmental Protection Agency declares to be a pest.⁸

Though there is regulation of pesticide applications by both national and state governments, there is a movement across the nation to incorporate integrated pest management (IPM) in schools. IPM is a strategy that emphasizes sanitation and exclusion of pests first and using pesticides only as a last resort. An IPM strategy is meant to lessen the amount and impact of toxins due to pesticide applications.

Like other toxic substances, such as asbestos, the short- and long-term effects of pesticides on children are often greater than on adults. The American Academy of Pediatrics found evidence that demonstrates an association between early life exposure to pesticides and pediatric cancers, decreased cognitive function, and behavioral problems.⁹ The EPA recommends that schools use IPM and 31 states have adopted requirements for applicators making pesticide applications in schools such as training, supervision, and certification.¹⁰ Colorado is not one of those states. However, there are some Colorado school districts that have adopted IPM as district policy.

⁶ EPA. *Restricted-Use Pesticides*, Retrieved July 17, 2014, from <http://www.epa.gov/pesticides/safety/applicators/restrict.htm>

⁷ *ibid.*

⁸ § 35-10-103(9), C.R.S.

⁹ American Academy of Pediatrics, (2012) "Policy Statement; Pesticide Exposure in Children," *Pediatrics* 130(6), p. e1757.

¹⁰ Janet A. Hurley, Thomas A. Green, Dawn H. Gouge, Zachary T. Bruns, Timothy Stock, Lynn Brabrand, Kathleen Murray, Carol Westinghouse, Susan T. Ratcliffe, Derrick Pehlman, and Lauren Crane, 2014, "Regulating Pesticide Use in United States Schools," *American Entomologist* 60(2), p. 107.

Legal Framework

History of Regulation

The Colorado General Assembly first regulated commercial pesticide applicators in 1953. Initial regulations required any person applying pesticides by aircraft for hire to obtain a license. Applicants were required to pass an examination and have surety in place.

Over the years the statutes were revised multiple times. Major changes are highlighted below.

In 1967, three types of pesticide applicators were delineated: ground agricultural applicator, aerial agricultural applicator, and commercial applicator. The General Assembly also repealed the surety bond requirement and mandated minimum liability insurance coverage of \$25,000 per person, \$50,000 per accident for bodily injury and \$5,000 for property damage.

During 1971, the General Assembly passed the Structural Pest Control Act. This law required any person preventing, controlling, or eradicating pests in household structures, commercial buildings, or other structures to be licensed. Along with the examination and liability insurance requirement, applicants had to have either two years of experience in structural pest control or hold a college degree with a major in entomology, sanitary or public health engineering, or related subjects.

In 1983, the Structural Pest Control Act was repealed and the Pesticide Applicators' Act (Act) was adopted. The Act covered all commercial pesticide applicators encompassing those who worked in the agricultural and structural settings. The Act incorporated U.S. Environmental Protection Agency (EPA) requirements including those in the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The Act required the Commissioner of the Colorado Department of Agriculture (Commissioner and CDA, respectively) to certify commercial applicators that use or supervise the use of restricted use pesticides.

The Act was amended in 1990, following a sunset review, to require training and passage of an examination for Qualified Supervisors and Certified Operators; require applicators to provide training to their technicians; require turf, ornamental, and aquatic applicators to post signs identifying the applicator and the pesticide, when applying pesticides; and create the Registry of Pesticide-Sensitive Persons (Registry). In 1996, amendments explicitly conferred primacy on the state for the regulation of pesticide applicators which created a uniform, statewide system.

A 2005 sunset review resulted in 13 recommendations for change being made by the General Assembly. The major changes adopted involved the use of the Registry and regulating private applicators in agricultural settings.

Federal Insecticide, Fungicide, and Rodenticide Act

FIFRA is the law which controls the regulation, sale, distribution and use of pesticides in the U.S. FIFRA authorizes the EPA to review and register pesticides and allow them for specified uses.¹¹

The EPA uses a risk/benefit analysis standard for pesticide approval and registration. In doing so, FIFRA mandates that the EPA regulate to protect human health and preserve the environment. To implement FIFRA, the EPA is specifically authorized to put the burden of proof on the chemical manufacturer; enforce compliance against banned and unregistered products; and promulgate the regulatory framework. Because FIFRA does not fully preempt state, tribal or local law, each state, tribal and local government may also regulate pesticide use.¹²

FIFRA's labeling requirements control when and under what conditions pesticides can be applied, mixed, stored, loaded or used, when areas may be reentered after a pesticide application, and when crops may be harvested. Requirements are also specified for pesticide containers and pesticide disposal. Under certain circumstances, FIFRA grants states the authority to issue special local needs registrations. In those cases, states may register a new or additional use of a federally registered pesticide product. However, the EPA may classify a pesticide as "restricted use" if it may cause unreasonable adverse effects even when used as directed on the product labeling.¹³

Restricted use pesticides may only be applied by individuals who are certified or who are under the supervision of a certified applicator. FIFRA empowers states to certify pesticide applicators as long as the certification program meets FIFRA conditions. If a state does not have a certification program, the EPA administers the program. Applicators are certified to assure proper application of a pesticide, to protect the health of the applicator, and to protect the health of farm workers.¹⁴

¹¹ U.S. Environmental Protection Agency. *Pesticides: Regulating Pesticides*. Retrieved March 3, 2014, from <http://www.epa.gov/pesticides/regulating/laws.htm>

¹² U.S. Environmental Protection Agency. *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*. Retrieved March 3, 2014, from <http://www.epa.gov/agriculture/Ifra.html>

¹³ *ibid.*

¹⁴ *ibid.*

The Pesticide Applicators' Act

Article 10 of Title 35, Colorado Revised Statutes (C.R.S.), contains the provisions of the Act. Because pesticides may pose a serious risk to the public health and safety, the General Assembly directs that individuals and businesses that apply any pesticides must be regulated.¹⁵ Additionally, because regulation is a statewide concern, the purpose of the Act is to provide scientifically sound, statewide pesticide regulation. The Act states that local regulation that is inconsistent with federal and state requirements does not achieve the same ends as statewide guidelines.¹⁶

The CDA and the Commissioner are charged with implementing the Act and adopting rules needed for implementation.¹⁷ Any person who uses or supervises the use of any pesticide or "device"¹⁸ in Colorado is regulated under the Act.¹⁹ There is some regulatory overlap between the Act and Article 9 of Title 35, C.R.S., the "Pesticide Act." The Pesticide Act regulates the refilling, registration, labeling, transportation, distribution, storage, use, and disposal of any pesticide and of certain devices.²⁰ However, the focus of this sunset review is the Act and regulation of pesticide "applicators," i.e., the people but not the substances *per se*.

The Commissioner has broad rulemaking authority for the administration and implementation of the Act, including but not limited to:²¹

- Regulating all aspects of pesticide application;
- Establishing qualifications for any applicant and standards of practice for licensees;
- Establishing classifications and subclassifications for any license;
- Issuing and reinstating any license authorized under the Act; and
- Determining the grounds for any disciplinary actions under the Act.

The Commissioner is also authorized to promulgate rules to comply with FIFRA. However, the rules may not violate any provision of Colorado law.²²

¹⁵ § 35-10-102, C.R.S.

¹⁶ § 35-10-112.5(1), C.R.S.

¹⁷ §§ 35-10-118(1), 118(2), and 118(10), C.R.S.

¹⁸ § 35-10-103(5), C.R.S. The Act defines "device" as any instrument or contrivance, other than a firearm, intended for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacteria, viruses, or other microorganisms on or in living man or other living animals); except that "device" shall not include equipment used for the application of pesticides when sold separately therefrom.

¹⁹ § 35-10-104, C.R.S.

²⁰ § 35-9-102, C.R.S.

²¹ § 35-10-118(2), C.R.S.

²² § 35-10-118(9), C.R.S.

The Commissioner may investigate to ensure compliance with the Act.²³ He or she has full authority to administer oaths and take statements, to issue witness and document subpoenas, and compel witnesses to disclose facts known to them relative to the matters of an investigation. If a witness fails to obey a subpoena, the Commissioner may petition the district court to order the witness to appear and testify or produce documentary evidence.²⁴

Regulation takes place in three general areas: pesticide use, licensing commercial applicator businesses, and licensing individual pesticide applicators.

Pesticide Use

STATE PRIMACY

The Commissioner, in cooperation with other state agencies or the federal government, may publish information relating to the use and handling of pesticides. He or she may also conduct applicator workshops to inform the regulated population about new developments in the field of pesticides.²⁵

The State has primacy over local governments in matters concerning the use and application of pesticides by individuals regulated by the Act and federal law, including, but not limited to:²⁶

- Directions for use;
- Classification of pesticides as general or restricted use;
- Mixing and loading pesticides;
- Regulating the application site, target pest, dosage rate, method of application, application equipment, frequency and timing of applications, application rate, reentry intervals, worker specifications, container storage and disposal, required intervals between application and harvest of food or feed crops, and rotational crop restrictions;
- Warnings regarding use on certain crops, animals, or objects;
- Using pesticides in or adjacent to certain areas;
- Issuing warning and precautionary statements, notifications, or statements of practical treatment (unless specifically provided for in the Act); and
- Promulgating licensing, training, or certification requirements for individuals regulated under the Act (This includes insurance and recordkeeping requirements).

²³ § 35-10-119(2), C.R.S.

²⁴ § 35-10-119(5), C.R.S.

²⁵ § 35-10-124, C.R.S.

²⁶ § 35-10-112.5(2), C.R.S.

State authority cannot preempt local authority to:²⁷

- Zone for sale, storage, and disposal of pesticides;
- Adopt or enforce building and fire codes;
- Regulate the transportation of pesticides consistently with but not more strictly than state and federal law;
- Develop a stormwater management program that is consistent with federal or state law; and
- Protect surface or groundwater drinking water supplies consistent with state or federal law.

If a local authority promulgates an allowable ordinance, it must file a certified copy of the ordinance and a map or legal description of the geographic area that it intends to regulate.²⁸

These provisions apply as long as the local authority does not attempt to, directly or indirectly, regulate or prohibit pesticide application by individuals regulated under the Act or federal law.²⁹

REGISTRY OF PESTICIDE-SENSITIVE PERSONS

The Act directs the Commissioner to establish the Registry of Pesticide-Sensitive Persons (Registry) through rule. Individuals may be placed on the Registry if they provide medical justification by a Colorado-licensed physician. The medical justification must be updated every two years and the Registry itself must be updated at least annually. The published Registry is to be readily accessible to all Commercial, Registered Limited Commercial and Registered Public applicators.³⁰ The CDA produces a standardized sign for all registrants to post on their property.³¹

Before applying a pesticide in residential or commercial circumstances, a licensed applicator is required to take “reasonable actions” to notify the public and any registered pesticide-sensitive person, of the date and approximate time of an application. The notification method varies and is particular to the type of application and the setting of the application.³²

The Act prevents a local jurisdiction from enacting and implementing greater notification requirements on regulated applicators. Nonetheless, local jurisdictions retain the authority to impose any notification requirements upon private individuals, property owners, and the general public concerning pesticide applications.³³

²⁷ § 35-10-112.5(3)(a), C.R.S.

²⁸ § 35-10-112.5(4), C.R.S.

²⁹ § 35-10-112.5(3)(b), C.R.S.

³⁰ § 35-10-112(1)(a), C.R.S.

³¹ § 35-10-112(1)(b), C.R.S.

³² §§ 35-10-112(1)(c), (1)(d), and 112(2), C.R.S.

³³ § 35-10-112(3), C.R.S.

PROHIBITED ACTIVITIES

Unless otherwise provided for by law, no regulated business or individual may use any regulated device or use, store, or dispose of pesticides, pesticide containers, rinsates, or other related materials, inconsistent with label directions or requirements or in an unsafe, negligent, or fraudulent manner.³⁴ Nor may they use, or recommend the use, of any regulated device or pesticide not registered with the Commissioner pursuant to the Colorado Pesticide Act or any pesticide inconsistent with the Commissioner's restrictions.³⁵

The Commissioner is directed to provide for the inspection and analysis of any pesticides being used, as well as any equipment and devices that require a licensed operator. He or she may require proper repairs or other changes before use.³⁶

Licensing

In addition to any license issued by the Commissioner, prior to making a pesticide application, operators whose application will result in a discharge to surface waters of the state must obtain permit coverage from the Colorado Department of Public Health and Environment.³⁷

Anyone who, for hire, applies pesticides or operates a regulated device must have a valid Commercial Applicator Business License (Business License). The Program has three different pesticide application classifications including Agricultural, Ornamental, and Structural. Each of the classifications has multiple subclassifications. The Business License will be issued only in the classification or subclassification in which the business's Qualified Supervisor is licensed.³⁸

The Act directs that the Commissioner implement three levels of licensure to individual pesticide applicators: Qualified Supervisor, Certified Operator, and Private Applicator.³⁹ Licenses are valid for up to three years, as determined by the Commissioner.⁴⁰ License fees are determined by the Commissioner.⁴¹

³⁴ §§ 35-10-117(2)(a) and (2)(b.5), C.R.S.

³⁵ § 35-10-117(2)(b), C.R.S.

³⁶ § 35-10-119(1), C.R.S.

³⁷ § 25-8-501(1), C.R.S.

³⁸ § 35-10-105, C.R.S.

³⁹ §§ 35-10-113, 114, and 114.5, C.R.S.

⁴⁰ § 35-10-116(1), C.R.S.

⁴¹ § 35-10-118(7), C.R.S.

The Act empowers the Commissioner to develop licensing competency requirements⁴² and to administer an examination to assure a minimum level of competency.⁴³ He or she is also responsible for establishing standards for issuing a license to those who hold a valid license from another jurisdiction where license requirements are substantially similar.⁴⁴ Regardless of the category in which an individual becomes licensed, he or she must:⁴⁵

- Pass a written examination in each pesticide application classification in which he or she wishes to be licensed;
- Have the experience and any other qualifications required by the Commissioner for licensure;
- Possess a Federal Aviation Administration certificate if he or she intends to apply pesticides aerially; and
- Pay a license fee.

The Commissioner designates by rule, which devices, when operated commercially, require the operator to be licensed. The license is required only for using the devices that the Commissioner determines are a significant risk to public health or safety.⁴⁶

Applicators regulated under the Act must maintain records of each application. The records must be retained for three years after the date of the application at the address on file with the Commissioner.⁴⁷

To renew a license, Qualified Supervisors, Certified Operators, or Private Applicators must pass examinations for their respective license category, or complete continuing education requirements.⁴⁸ Each licensee must also submit a renewal application prior to expiration of a current valid license with the renewal fee.⁴⁹ If the application is not postmarked on or before expiration, a penalty of 10 percent must be paid prior to the license being renewed.⁵⁰ If a license has been expired less than 180 days, it may be reinstated if the licensee submits an application with a reinstatement fee and proves that all renewal requirements were satisfied on the license's expiration date.⁵¹ Any license expired more than 180 days cannot be reinstated. In those cases it is necessary to apply for a new license.⁵²

⁴² § 35-10-118(5), C.R.S.

⁴³ § 35-10-118(3), C.R.S.

⁴⁴ § 35-10-118(4), C.R.S.

⁴⁵ §§ 35-10-115(1) and 115(4), C.R.S.

⁴⁶ § 35-10-118(9.5), C.R.S.

⁴⁷ § 35-10-111, C.R.S.

⁴⁸ 8 CCR 1203-2, 2.47, and 2.58.

⁴⁹ § 35-10-116(3), C.R.S.

⁵⁰ § 35-10-116(4), C.R.S.

⁵¹ § 35-10-116(6), C.R.S.

⁵² § 35-10-116(7), C.R.S.

To obtain a Business License, an applicant must submit an application⁵³ and:

- Acquire liability insurance of at least \$400,000 which cannot be cancelled without at least 10 days prior notification to the Commissioner;⁵⁴
- Secure the services of a Qualified Supervisor licensed in the application class of pesticide or device used by the business;⁵⁵
- Provide verifiable training to all employed technicians according to standards adopted by the Commissioner;⁵⁶
- List all pesticide application equipment;⁵⁷ and
- Possess a Federal Aviation Administration certificate if it engages in aerial applications.⁵⁸

If more than one pesticide application-related business name is situated in a single location, the name of each business must be listed with the Commissioner. No additional license is required for the added named businesses. However, separate, distinct records are required for each named business.⁵⁹ Every licensee must report any change to the information provided in its application within 15 days of a change.⁶⁰ Every invoice that a business issues must include a statement, in conspicuous type, that indicates that Commercial Applicators are licensed by the Commissioner.⁶¹

A licensee must renew its Business License on or before its expiration. If a renewal application is not postmarked on or before the expiration date, a penalty fee of 10 percent of the renewal fee is assessed and added to the renewal fee. No license will be renewed unless the entire fee is paid. If the renewal application is not postmarked on or before the 30th day following the expiration of the license, the Business License will not be renewed, and the Commercial Applicator must apply for a new license.⁶²

No registration is required for Limited Commercial Applicators or Public Applicators that apply only general use pesticides. Limited Commercial Applicators are individuals or entities that are:⁶³

... engaged in applying pesticides in the course of conducting a business other than the production of any agricultural commodity; except that such application shall be only in or on property owned or leased by the person or the person's employer.

⁵³ § 35-10-106(2), C.R.S.

⁵⁴ § 35-10-106(1)(a), C.R.S.

⁵⁵ § 35-10-106(1)(b), C.R.S.

⁵⁶ § 35-10-106(1)(c), C.R.S.

⁵⁷ § 35-10-106(1)(d), C.R.S.

⁵⁸ § 35-10-106(1)(e), C.R.S.

⁵⁹ § 35-10-106(3), C.R.S.

⁶⁰ § 35-10-106(6), C.R.S.

⁶¹ § 35-10-108, C.R.S.

⁶² § 35-10-107, C.R.S.

⁶³ § 35-10-103(8), C.R.S.

A Public Applicator is any state or local governmental entity applying pesticides.

The Act also provides that Limited Commercial and Public Applicators may voluntarily register with the Commissioner even if they only apply general use pesticides. Nonetheless, all Limited Commercial and Public Applicators that apply restricted use pesticides are required to register with the Commissioner.⁶⁴

To register as a Limited Commercial Applicator or Public Applicator, the registrant must submit an application with the name and address of the applicant, a primary contact, the address and telephone number of the location where the applicator's records are kept, the name and identification numbers of all Qualified Supervisors, a registration fee, and any other information required that may be required by the Commissioner.⁶⁵

Registered Limited Commercial and registered Public Applicators must secure the services of a Qualified Supervisor who is licensed in the class or subclass of application utilized by the entity.⁶⁶ These entities must also provide verifiable training to all their technicians according to standards adopted by the Commissioner.

The Act catalogs several actions that are unlawful. Generally, unlawful actions relate to acting without a license; failure to comply with the Act, associated rules, and federal regulations; and engaging in fraudulent activities.

Violations concerning fraud and acting without a license are also violations of the Colorado Consumer Protection Act.⁶⁷

The Act also specifically prohibits a Commercial Applicator, Qualified Supervisor, or Certified Operator from supervising or recommending the use of a device or pesticide that, according to generally accepted standards, would be ineffective.⁶⁸ The Act does carve out a caveat in cases when a customer specifically directs a licensee to use a device or pesticide outside of the generally accepted standards. If after being advised against its use, the customer chooses to proceed, the customer has no cause of action for damages against the applicator if the use causes death or injury. This exception applies only if the application does not disregard the labeling contained on the pesticide or the device, it does not violate any provision of the Act or the Colorado Pesticide Act, or the customer cannot establish negligence.⁶⁹

Applying pesticide or operating a device when the insurance required under the Act is not in full force and on file with the Commissioner is prohibited. It is also a violation of the Act to not provide a customer with certain specified essential information.⁷⁰

⁶⁴ § 35-10-109, C.R.S.

⁶⁵ 8 CCR 1203-2, 2.24, and 2.25.

⁶⁶ § 35-10-110(1), C.R.S.

⁶⁷ § 35-10-117(6), C.R.S.

⁶⁸ § 35-10-117(3)(b), C.R.S.

⁶⁹ § 35-10-117(3)(c), C.R.S.

⁷⁰ § 35-10-117(4), C.R.S.

Enforcement

The Commissioner is authorized to enter into cooperative agreements with any state or federal entity to enforce the provisions of the Act, receive grants-in-aid, secure uniformity of rules, and enter into reciprocal licensing agreements.⁷¹

At any reasonable time during regular business hours, with consent or upon obtaining an administrative search warrant, the Commissioner has free unimpeded access to required records and to:⁷²

any land, water, or structures thereon in which any devices that require licensure for use, pesticides, containers, rinsates, or other related materials are or have been kept, used, stored, handled, processed, disposed of, or transported for the purpose of carrying out any provision of the Act or any rule made pursuant to the Act;

If the Commissioner has reasonable cause to believe a violation of the Act occurred, he or she may issue a cease and desist order (C&D) or seek a court ordered injunction preventing continued violation. At any time after issuance of a C&D, the recipient may request a hearing conducted pursuant to the provisions of the State Administrative Procedure Act.⁷³

The Commissioner may issue letters of admonition, enter into stipulations, or restrict, impose probation on, deny, suspend, refuse to renew, or revoke any license or registration issued under the Act.⁷⁴ Disciplinary actions may be issued against a licensee or registrant who:⁷⁵

- Has refused or failed to comply with any provision of the Act, associated rule, or any lawful order of the Commissioner;
- Has been convicted of a felony for an offense related to the conduct regulated by the Act;
- Has had an equivalent license or registration denied, revoked, or suspended by any authority;
- Has violated FIFRA;
- Has refused to provide reasonable, complete, and accurate information regarding methods or materials used, or work performed when requested by the Commissioner;
- Has falsified any information requested by the Commissioner; and
- Has had a disciplinary action from another jurisdiction that would be a basis for disciplinary action under the Act.⁷⁶

⁷¹ § 35-10-118(8), C.R.S.

⁷² § 35-10-119(4), C.R.S.

⁷³ §§ 35-10-120(2) and 120(3), C.R.S.

⁷⁴ § 35-10-121(1), C.R.S.

⁷⁵ § 35-10-121(1), C.R.S.

⁷⁶ § 35-10-121(2), C.R.S.

No licensee whose license has been revoked may apply for a license for two years from the date of such revocation.⁷⁷ Any person aggrieved by a final disciplinary action, may appeal to the Colorado Court of Appeals.⁷⁸

A person who violates the Act is subject to a civil penalty determined by the Commissioner or the court. The maximum penalty cannot exceed \$1,000 per violation for a first offense and may be doubled if the person has violated for a second time.⁷⁹ No fine may be levied until the alleged violator is given notice and opportunity for a hearing under the State Administrative Procedure Act.⁸⁰ Prior to imposing a fine the court or Commissioner may consider the effect on the ability of the person charged to stay in business.⁸¹ If the Commissioner is unable to collect a fine, he or she may bring suit to recover the fine plus attorney's fees.⁸²

In addition to the civil penalties, the Act specifies criminal penalties. Individuals commit a Class 1 misdemeanor when found guilty of:

- Performing actions that require a license without holding a license;⁸³
- Soliciting or advertising for work without a license;⁸⁴ or
- Impersonating a government official or inspector.⁸⁵

Individuals commit a Class 1 misdemeanor when found guilty of two or more of the following violations:

- Failing or refusing to comply with the Act;⁸⁶
- Using or storing regulated materials in an unsafe, negligent, or fraudulent manner inconsistent with labeling directions or requirements;⁸⁷
- Failing or refusing to comply with any requirements of the federal worker protection standards;⁸⁸
- Permitting the use of a license by any other person;⁸⁹ and
- Operating a device or applying pesticide without insurance being in full force and on file with the CDA.⁹⁰

Sentences for Class 1 misdemeanors range from six months in prison, a \$500 fine, or both, to 18 months in prison, a \$5,000 fine, or both.⁹¹

⁷⁷ § 35-10-121(3), C.R.S.

⁷⁸ § 35-10-121(4), C.R.S.

⁷⁹ § 35-10-122(1), C.R.S.

⁸⁰ § 35-10-122(2), C.R.S.

⁸¹ § 35-10-122(4), C.R.S.

⁸² § 35-10-122(3), C.R.S.

⁸³ § 35-10-117(1)(a), C.R.S.

⁸⁴ § 35-10-117(1)(c), C.R.S.

⁸⁵ § 35-10-117(1)(g), C.R.S.

⁸⁶ § 35-10-117(1)(e), C.R.S.

⁸⁷ §§ 35-10-117(1)(i), and 117(2), C.R.S.

⁸⁸ § 35-10-117(1)(j), C.R.S.

⁸⁹ § 35-10-117(3)(a), C.R.S.

⁹⁰ § 35-10-117(4)(a), C.R.S.

⁹¹ § 18-1.3-501(1)(a), C.R.S.

A Class 2 misdemeanor charge is warranted when any CDA employee or official discloses any information submitted to the CDA pursuant to the Act for any unauthorized purpose.⁹²

Individuals commit a Class 2 misdemeanor when found guilty of any of the following violations:⁹³

- Making false, misleading, deceptive, or fraudulent representations, including the absolute safety of any regulated product;⁹⁴
- Failing to maintain or submit records or reports required under the Act;⁹⁵
- Making false or misleading representations or statements of fact in an application, record, or report required under the Act;⁹⁶ and
- Failing to provide any customer with any required information.⁹⁷

Sentences for Class 2 misdemeanors range from three months in prison, a \$250 fine, or both, to 12 months in prison, a \$1,000 fine, or both.

Pesticide Advisory Committee

The Act provides for an advisory committee appointed by the State Agricultural Commission to assist the Commissioner in promulgating rules.⁹⁸ The 11-member body must represent:⁹⁹

- A formulator, or a formulator's Colorado agent, who is actively engaged in selling pesticides in Colorado;
- A Licensed Commercial Applicator who is actively engaged in the commercial application of pesticides for the control of agricultural crop pests;
- A Licensed Commercial Applicator who is actively engaged in the commercial application of pesticides for the control of turf or ornamental pests;
- A Licensed Commercial Applicator who is actively engaged in the application of pesticides for the control of structural pests;
- A Qualified Supervisor who is employed by a Limited Commercial Applicator registered under the Act and who is actively engaged in the application of pesticides;
- Two registered Public Applicators who are elected officials or designees;
- A member from Colorado State University Agricultural Experiment Station or Extension Service;
- The Colorado Department of Public Health and Environment; and
- Two members from the general public, one of whom must be actively engaged in agricultural production.

⁹² § 35-10-117(5), C.R.S.

⁹³ § 35-10-123(3), C.R.S.

⁹⁴ § 35-10-117(1)(f), C.R.S.

⁹⁵ § 35-10-117(2)(g), C.R.S.

⁹⁶ § 35-10-117(2)(f), C.R.S.

⁹⁷ § 35-10-117(4)(b), C.R.S.

⁹⁸ § 35-10-125(1), C.R.S.

⁹⁹ § 35-10-125(2) C.R.S.

Program Description and Administration

The Pesticide Applicators' Act (Act) operates under the authorization of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which manages the sale and use of pesticides in the U.S. The Act is implemented by the Commissioner of Agriculture (Commissioner) through the Colorado Department of Agriculture's (CDA) Pesticide Applicator Program (Program). Program implementation is assisted by a statutorily authorized Pesticide Advisory Committee consisting of volunteers from the public and the industry.

The basic charges for the Program are to qualify businesses and individuals that use pesticides or devices to control pests, and regulate the manner in which the pesticide or device is used. Any person who uses a pesticide is regulated through the Program but only businesses and individuals who apply pesticides for hire or private applicators who apply restricted use pesticides during the production of an agricultural commodity must be licensed. The Program is also responsible for maintaining and enforcing a Registry of Pesticide-Sensitive Persons for people who verify a pesticide sensitivity problem with a Colorado-licensed physician.

The Program is funded through U.S. Environmental Protection Agency (EPA) grants and by a cash fund established from fees and fines assessed under the Act. Table 1 indicates the full-time equivalent (FTE) employees and monetary expenditures made by the Program during the period under sunset review, as well as the source of the funds.

Table 1
Agency Fiscal Information
Fiscal Years 08-09 through 12-13

Fiscal Year	Total Program Expenditure	FTE
08-09	\$1,076,444 Cash fund \$483,118 EPA Grant funds	10.5
09-10	\$811,730 Cash fund \$444,163 EPA Grant funds	10.5
10-11	\$895,516 Cash fund \$497,905 EPA Grant Funds	11.5
11-12	\$970,956 Cash fund \$524,014 EPA Grant funds	11.5
12-13	\$1,183,779 Cash funds \$358,098 EPA Grant funds	12.5

Program staff has increased by two FTE during the period under review. It added one inspector during fiscal year 10-11 and another inspector in fiscal year 12-13. Currently, the Program allots 6.5 FTE to administrative staff and 6 FTE to inspection staff.

Licensing

The Program regulates both businesses and individuals that apply pesticides. The Program has three different licensing classifications: Agricultural, Ornamental, and Structural. Each of the classifications has multiple subclassifications. Licensed businesses and individuals practice in one or more of the application classifications.

As directed in the Act, there are three main categories of license issued by the Program to individual pesticide applicators: Qualified Supervisor, Certified Operator, and Private Applicator.¹⁰⁰

Both Qualified Supervisors and Certified Operators are licensed by pesticide application category and must pass a category-specific examination in each category in which they plan to apply pesticides. Licenses are valid for three years.

Qualified Supervisors

If a person works for a Commercial Applicator, Registered Limited Commercial Applicator, or Registered Public Applicator and evaluates pest problems, recommends pest controls using pesticides, uses any pesticide, sells pesticide application services, or supervises others in any of these functions, that person must be licensed as a Qualified Supervisor.¹⁰¹

To become a Qualified Supervisor, one must take and pass an examination, including any category-specific examinations that may be required, and pay a \$100 fee. A Qualified Supervisor is responsible for the "complete supervision of all pest control recommendations, soliciting, mixing, loading, and application of pesticides for the licensee."¹⁰²

Certified Operators

Any person who applies a restricted use pesticide without the on-site supervision of a Qualified Supervisor must be a Certified Operator.¹⁰³ To become a Certified Operator, one must complete an application, take and pass an examination, and pay a \$100 fee.

¹⁰⁰ §§ 35-10-113, 114 and 114.5, C.R.S.

¹⁰¹ 8 CCR1203-2, 2.32.

¹⁰² 8 CCR1203-2, 2.40.

¹⁰³ 8 CCR1203-2, 2.33.

Private Applicators

A person who uses or supervises the use of a restricted use pesticide on an agricultural commodity on his or her own or leased property must have a Private Applicator's license. If an agricultural producer is not licensed, an employee-applicator must be licensed as a Private Applicator. A Private Applicator may apply restricted use pesticides to another agricultural producer's property if there is no compensation other than trading of personal services between producers of agricultural commodities.¹⁰⁴

A Private Applicator is responsible for any unlicensed person, acting under his or her instruction and control, who mixes, loads, or applies a restricted use pesticide.¹⁰⁵

To become a Private Applicator, an individual must file an application, pass an examination, and pay a \$75 fee. The license expires three years from the licensee's birth date.

License renewal requires that each Qualified Supervisor, Certified Operator, and Private Applicator must pass the general examination and any applicable category-specific examinations, or complete continuing education requirements.

Technicians

Technicians are not licensed or registered under the Act but are required to be trained. There are three types of technicians defined in Program rule. An "applicator technician" is a person whose job includes using pesticides. A "flagger technician" is an individual who designates the on-site configuration of a pesticide application. A "sales technician" is a technician whose sole job is selling application services.¹⁰⁶ The training requirements for technicians vary and are dependent on the type of technician and the category of application.

¹⁰⁴ 8 CCR 1203-2, 2.49.

¹⁰⁵ 8 CCR 1203-2, 2.54.

¹⁰⁶ 8 CCR 1203-2, 5.1(a), (c), and (e).

Table 2 indicates the number of individual applicators licensed by the Program during the years under review.

Table 2
Licensing Information
Fiscal Years 08-09 through 12-13

Number of Licenses					
Fiscal Year	Qualified Supervisor	Certified Operator	Private Applicator	TOTAL	Renewals
08-09	2,483	1,341	7,501	11,325	1,648
09-10	2,513	1,451	5,379	9,343	1,955
10-11	2,615	1,567	4,908	9,090	2,024
11-12	2,658	1,601	4,815	9,074	1,986
12-13	2,726	1,609	4,730	9,065	1,861

Note that the number of Private Applicator licensees who apply restricted use pesticides solely in an agricultural setting is higher than the two other types combined in each of the years under review.

Commercial, Limited Commercial, and Public Pesticide Applicators

Every business that applies pesticides as a commercial endeavor must acquire a Commercial Applicator's license. Commercial Applicators apply general use and restricted use pesticides. To obtain a Commercial Applicator's license, an applicant must submit a completed application with a \$350-license fee. Every applicant must also prove that the business has liability insurance of at least \$400,000 which must be in force and provide the name of at least one Qualified Supervisor in each classification in which the business chooses to apply pesticides.

If the business is a corporation, a limited liability partnership, or a limited liability company it must submit a Certificate of Good Standing from the Colorado Secretary of State.

If the business is an aerial applicator, it must also submit a Federal Aviation Administration certification.

Commercial Applicator business licenses expire on January 1 of each year. Renewals postmarked after the first working day of January and before February 1, are charged a late fee. If a Commercial Applicator fails to renew by February 1, the business must apply for a new license.

Registration as a Limited Commercial or Public Applicator is mandatory only for those entities that apply restricted use pesticides. To register as a Limited Commercial or Public Applicator an applicant must submit a completed application with a \$50 fee and provide the name of a Qualified Supervisor in each category in which the business chooses to apply pesticides. If a Limited Commercial Applicator applicant is a corporation, a limited liability partnership, or a limited liability company, it must also submit a Certificate of Good Standing from the Colorado Secretary of State. Registrations expire on January 1 of each year.

Table 3 enumerates the businesses approved to operate during the period under sunset review.

Table 3
Business Licenses
Fiscal Years 08-09 through 12-13

Fiscal Year	Commercial	Limited Commercial	Public	Total
08-09	960	28	90	1,078
09-10	1,008	30	93	1,131
10-11	1,031	35	93	1,159
11-12	1,054	33	106	1,193
12-13	1,062	33	99	1,194

Examinations

The CDA formed a partnership with the Colorado State University Extension and Metro Institute to provide computer-based licensing examinations for Qualified Supervisors and Certified Operators. The examinations are scheduled online and are given at several locations throughout the state. Testing center locations include:

- Lakewood;
- Sterling;
- Lamar;
- Center;
- Cortez;
- Grand Junction; and
- Fort Collins.

The examination fee is \$30 per examination for the general examination and each subclassification an examinee chooses to test in. For example, if an individual chooses to examine in Wood Preservation and Wood Products Treatment, Outdoor Vertebrate Pest Control, and Residential/Commercial Pest Control, the examination fees will total \$120. (4 examinations, *the general and 3 subclassifications* x \$30 = \$120)

The general examination includes questions concerning:

- Laws and Regulations;
- Pesticide Labels and Labeling;
- Pesticides;
- Host and Pest Identification and Biology;
- Safety and Protection; and
- Pesticide Application.

Examinees must score a 70 percent or higher to pass. Because the examinations are given on computers, the results are available at the conclusion.

Table 4 lists the number of examinations given and the results during the period under review.

Table 4
Examination Data
Fiscal Years 08-09 through 12-13

Fiscal Year	Examinations	Pass Rate
08-09	4,435	47%
09-10	4,976	50%
10-11	4,324	53%
11-12	3,464	56%
12-13	2,727	73%

The computer-based system was instituted midway through fiscal year 11-12. At that time, the number of examinations given dropped and the pass rate improved substantially.

A person wishing to obtain a Private Applicator's license must pass the private pesticide applicator examination. The Private Applicator examination is an open-book, take-home examination. The cost of the examination packet is \$20.

Inspections

Each year, the Program inspects the records of approximately one-third of all Commercial Applicators and inspects the records of other licensees and registrants that apply restricted use pesticides. Inspections are based on the records of purchases of restricted use pesticides obtained from licensed pesticide dealers under the authority of the Colorado Pesticide Act.¹⁰⁷ Table 5 enumerates the inspections made by Program staff during the years under review.

Table 5
Record Inspections
Fiscal Years 08-09 through 12-13

Fiscal Year	Inspections
08-09	1,139
09-10	1,282
10-11	1,171
11-12	1,389
12-13	1,381

Complaints/Disciplinary Actions

Any allegation of a violation of the Act must be made in writing. When the Program receives a complaint, the first thing it does is determine if it has jurisdiction over the issue. If jurisdiction is established, the case is assigned to an investigator. Those that allege human endangerment take top priority. Complaints are then placed into one of two categories:

- *Formal Complaint.* Information is such that it is likely one or more violations occurred; or
- *Preliminary Complaint.* Additional information is needed. There is a reasonable expectation that the necessary information can be obtained. A preliminary complaint may be elevated to a formal complaint.

Based on the details of the complaint, the investigator will examine the application records, obtain further statements from the applicator, technicians, and complainant, and may take samples from the applicator's clothing and any plants, earth, water, or other media that may be involved in the complaint.

¹⁰⁷ § 35-9-101, *et. seq.*, C.R.S.

Table 6 indicates the complaints received by the Program during the period under review. The complaints fall into two general categories: "Practicing without a License" and "Standard of Practice." Standard of Practice complaints are those that allege an applicator did not follow the legal protocols established for the pesticide application or the pesticide applicator. The protocols are often specific to both the individual pesticide being applied as well as the environmental conditions at the time of application.

Table 6
Complaints
Fiscal Years 08-09 through 12-13

Complaints	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13
Practicing without a License	5	3	4	11	5
Standard of Practice	49	48	36	63	46
TOTAL	54	51	40	74	51

During fiscal year 11-12, there was a one-time increase in the number of "Practicing without a License" complaints. CDA reported that in that year it had more reports of unlicensed applicators coming in from licensed applicators observing unlicensed activity in the field.

The data illustrate that there were dramatic changes in the number of complaints filed concerning "Standard of Practice." During fiscal year 10-11, an approximate 25 percent drop was followed by a 75 percent increase in fiscal year 11-12. Following these fluctuations, the complaints returned to stasis. According to CDA staff, there was no apparent specific reason for such fluctuation.

Table 7 illustrates, for the fiscal years indicated, the number and nature of actions taken.

Table 7
Program Final Actions
Fiscal Years 08-09 through 12-13

Action	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13
Revocation / Surrender / Voluntary Relinquishment	0	0	0	0	0
Suspension	0	0	0	0	0
Probation / Practice Limitation	0	0	0	0	0
Letter of Admonition	1	1	4	0	5
License Denied	0	0	0	0	0
Fine	12	9	14	15	13
Cease and Desist Order	6	26	33	27	59
Referred to EPA	1	0	0	0	2
Notice of Violation	28	41	52	22	58
Total Disciplinary Actions	48	77	103	64	137
Dismiss	31	16	17	22	32
Letter of Concern	0	0	0	1	2
Total Dismissals	31	16	17	23	34

Note the majority of the actions taken by the Program are “Notices of Violation.” The Program will typically write a Notice of Violation as a warning to a licensee that there has been an infringement of the Act. If there is a subsequent issue with the licensee or individual, the Program will take a stronger action such as a cease and desist order or a fine.

Table 8 enumerates the total fines issued and the value of the fines for the period under sunset review.

Table 8
Fines
Fiscal years 08-09 through 12-13

Fiscal Year	Number of Fines Imposed	Value of Fines Imposed	Value of Fines Collected
08-09	12	\$297,250	\$25,500
09-10	8	\$10,240	\$3,490
10-11	14	\$84,000	\$32,000
11-12	15	\$27,000	\$13,750
12-13	13	\$22,400	\$12,750

Note the value of fines in fiscal years 08-09 and 10-11 was very high compared to the other years under review. In each of these years, there were Commercial Applicators that were significantly out of compliance on multiple applications. In fiscal 08-09, one applicator committed more than 350 violations. During fiscal year 10-11, two applicators committed more than 45 separate violations which accounted for more than half of the total imposed fines.

Analysis and Recommendations

Recommendation 1 – Continue the Pesticide Applicators’ Act for nine years, until 2024.

Pesticide use provides benefits to society. Maladies such as asthma, Hantavirus, and West Nile Virus are associated with exposure to pests. The agricultural industry has saved millions of dollars that otherwise would have occurred from crop failure due to pests. While there are benefits to pesticides, they have been documented to cause environmental damage and short- and long-term health problems. Problems such as skin disorders, pulmonary problems, and cancer are documented consequences of pesticide exposure. Because of the possibility of problems, pesticides are heavily regulated around the world.

The Pesticide Applicators' Act (Act), Article 10 of Title 35, Colorado Revised Statutes (C.R.S.), provides Colorado with a regulatory process which minimizes exposure to pesticides. The Colorado Department of Agriculture (CDA) is authorized through the U.S. Environmental Protection Agency (EPA) and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as the local power to implement and enforce pesticide law.

The EPA approves or rejects pesticides using a risk-based formula. It also determines what amount of pesticides may be used without posing excessive risk of harm and under what conditions each pesticide can be used and stored to avoid harm. Those determinations are placed on a label and that label is placed on the pesticide container. The Act makes the Commissioner of Agriculture (Commissioner) responsible for qualifying the individuals who apply pesticides. Once qualified, applicators are professionally responsible for guaranteeing that the pesticide label safeguards are followed. In most cases, if the label instructions are followed, the risks associated with pesticide use are minimal. However, if the label instructions are not followed, there is a greater possibility of harm.

The stated intent of the Act is to control insects, rodents, weeds, and other forms of life that may be injurious to crops, livestock, and other plant and animal life, structures, and individuals. But because pesticides contain toxic substances which may pose a serious risk to the public health and safety, the regulation of pesticide use is necessary to prevent adverse effects to both individuals and the environment.¹⁰⁸

The Act directs that any Commercial Applicator business must obtain a business license from the Commissioner. It also mandates the Commissioner to qualify most of those individuals who apply any pesticides in a commercial setting. During fiscal year 12-13 there were 1,062 Commercial Applicator businesses licensed in Colorado. These businesses employed thousands of Qualified Supervisors, Certified Operators, and technicians, all of whom must undergo some training before applying pesticide.

¹⁰⁸ § 35-10-102, C.R.S.

The Act further directs that any person that applies restricted use pesticides, regardless of the setting, must have training and pass an examination. Restricted use pesticides are designated as such by the EPA because they are more toxic than general use pesticides and pose a likely harm to the applicator, other humans, other species, and the environment when the use is not constrained. The EPA requires that any person using a restricted use pesticide be trained. Aside from the Commercial Applicators, there are three other categories of applicators qualified by the CDA to use restricted use pesticides: Registered Limited Commercial, Registered Public, and Licensed Private Applicators. During fiscal year 12-13, there were 33 Limited Commercial Applicators, 99 Public Applicators, and 4,730 Private Applicators in Colorado.

The Commissioner is instructed under the Act to establish a Registry of Pesticide-Sensitive Persons (Registry). Individuals may be placed on the Registry if they provide medical justification by a Colorado-licensed physician. Before applying pesticides, a Commercial Applicator making pesticide applications to turf, ornamental trees or shrubs or within multifamily dwellings must take reasonable actions to notify any registered pesticide-sensitive person, of the date and approximate time of the application.

The Act also creates the Pesticide Advisory Committee (PAC). The PAC is a group of individuals appointed from the public, the industry, and the government authorized by the Act to assist the Commissioner in promulgating rules and regulations to carry out the provisions of the Act. The CDA acknowledges the PAC's important role in the success of the program. The PAC acts as a conduit between the CDA and the public. It allows the CDA to hear what is happening outside of the regulatory environment and it allows those subject to regulation to have input into the regulatory process.

A considerable risk exists to public health, safety and welfare without regulation of pesticide applicators. The dangers of pesticides being misapplied by untrained, unsupervised individuals are substantial. Misapplied pesticides can be unsafe. These grounds indicate that a strong regulatory program is needed to protect the public from exposure-related danger. Therefore, the General Assembly should continue the Act for nine years, until 2024.

Recommendation 2 – Require Limited Commercial Applicators, and individuals who perform pesticide applications for Public Applicators, to acquire training in the core elements of pesticide use, established by the Commissioner, prior to applying general use pesticides.

In the Act, the General Assembly established that because pesticides contain toxic substances which may pose enough of a risk to the public, it is necessary to regulate the individuals that apply pesticides commercially. Commercial Applicators are regulated whether they apply restricted use pesticides or general use pesticides. General use pesticides can be purchased in hardware stores, department stores, and supermarkets, among other common places, by anyone. Still, the Act requires that any person who applies general use pesticides for remuneration must be trained to do so. This ostensibly protects the public from misapplication.

Commercial pesticide applications take place in many settings. Most commercial applications occur in single residential locations but they may take place in a forest, a prairie, a school, or an apartment building. Regardless of the location of an application, the General Assembly has directed that an individual applicator must be qualified as a Qualified Supervisor, a Certified Operator, or an applicator technician prior to applying any pesticide for hire. The Commissioner has established 45 different examinations to qualify applicators who work in the commercial marketplace. Again, the assumption is that regardless of the setting or the pesticide being used for pest mitigation, the person must be qualified in order to minimize risk to the public and to the environment. Despite the concern written into the Act, there is a large hole in the regulatory safety net.

No training is required of the individuals who work in a Limited Commercial and Public Applicator capacity to apply general use pesticides. Training is required only when they apply restricted use pesticides. Limited Commercial Applicators are,

... engaged in applying pesticides in the course of conducting a business other than the production of any agricultural commodity; except that such application shall be only in or on property owned or leased by the person or the person's employer.¹⁰⁹

A building maintenance person or a daycare center janitor, are examples of Limited Commercial Applicators. The Act defines a Public Applicator as any state or local governmental entity that applies pesticides.

The problem with this system is that the Act does not account for the possible harm to the public in the areas that the Limited Commercial and the Public Applicators apply pesticides. In these cases, there is often more public exposure to pesticides compared to the applications made by Commercial Applicators.

For clarification, imagine the following scenarios. A hotel has a bed bug problem so it decides to call an exterminator. The exterminator comes in, assesses the problem, and treats the hotel with pesticides. This person is probably trained in structural and interior mitigation as well as health and safety matters. In another scenario, the hotel manager asks the front desk clerk to go to the store and pick up the same pesticide that the trained applicator used to treat the affected rooms. In theory, as long as the desk clerk follows the directions on the label, there is no more harm that can occur to hotel patrons than if the commercial mitigation company had come into the building. However, the Act mandates training for the first applicator to protect the public but not the second applicator. Both applicators are being paid to perform pest mitigation and both applications are in places of high public access.

¹⁰⁹ § 35-10-103(8), C.R.S.

The training exemption for Limited Commercial and Public Applicators is likened to a homeowner applying pesticides on his or her property. However, the dynamic is very different. Applying pesticides in one's own home means the applicator is responsible for the safety of his or her own family. This is not the case for the office maintenance person that applies pesticides in a building where hundreds of people work, or for the public works employee who applies pesticides in a park where thousands of people recreate. If training is necessary to protect the public from harm then the manner in which the money exchanges hands should not have bearing on the situation. A public employee and a maintenance person both get paid to apply pesticides in a public setting.

When a commercial pest mitigation is executed in a home using a general use pesticide, it must be performed by a trained individual. This home-based application will affect only the handful of people in that home while the pesticides are active but because it is a commercial transaction, the Act demands that the applicator must be trained.

Basing the level of public protection on whether or not a business-related transaction is direct, as is the case for Commercial Applicators, or secondary, as is the case for Limited and Public Applicators, is a weak foundation for public policy. The public should be protected from harm in the public environment regardless of the business situation.

The General Assembly should require Limited Commercial applicators and individuals who perform pesticide applications for Public Applicators, acquire the same level of training as an applicator technician in the application classification(s) in which he or she applies general use pesticides. Applicator technicians are normally trained by an employer in the core elements of pesticide use. They get the lowest level of training required of commercial applicators. Typically an applicator technician does not work without supervision. Supervision should not be a requirement for Limited Commercial and Public Applicators to apply general use pesticides. The point is to prepare the individuals as to the ramifications of using pesticides and devices prior to using them in public settings.

There are some who disagree with increasing the training for Limited Commercial and Public Applicators. They claim that training costs too much and that it is already a violation to apply pesticides without following the label. This justification rings hollow. If the General Assembly was to follow that logic, then the application of only restricted use pesticides would be regulated at all. The rationale for licensure by the federal government and General Assembly is that even with labels that include directions for use, because the substances are toxic, additional training is necessary in some circumstances. Drawing a line between whether training is necessary or unnecessary based on the method of payment to the individual making the application is arbitrary and does not take into account the health, safety, and welfare of the public. Protecting the public is the footing on which the Act sits.

Therefore, the General Assembly should require Limited Commercial applicators, and individuals who perform pesticide applications for Public Applicators, to acquire training in the core elements of pesticide use, established by the CDA, prior to applying general use pesticides.

Recommendation 3 – Add representation from the agricultural sector affected by the Worker Protection Standard and from the organic growers to the PAC.

Section 35-10-125, C.R.S., creates the PAC. The PAC is a valuable tool made up from the regulated industry, governmental organizations, and the general public. These are people and groups affected by pesticide applications. The statutory charge of the PAC is to advise the Commissioner in promulgating rules but the Commissioner relies on the PAC for much more. The PAC is a channel through which flow the concerns of interested parties and through which regulators can perform outreach.

Because the outreach is core to the utility of the PAC, the membership should be expanded to include someone in the agricultural sector who is affected by the EPA Worker Protection Standard (WPS) and someone who represents organic growers. The WPS attempts to lessen the risk of poisoning and injury among agricultural workers and pesticide handlers. The concerns of the organic community surround the methods in which pesticides are applied so drift onto their crops does not occur. These are two sectors of the population affected by the use of pesticides and the Act that currently have no representation on the PAC. Casting as wide a net as is practicable when seeking advice is the best way to ensure that Act implementation represents public interests.

Therefore, the General Assembly should add representation from the agricultural sector affected by the WPS and from the organic growers.

Recommendation 4 – Adopt the federal standard of two years for Private Applicator recordkeeping.

It is a violation of the Act for Private Applicators to fail to maintain records.¹¹⁰ When the Commissioner assumed the regulation of Private Applicators in 2007, the same recordkeeping standard that the Act holds for the other license categories was applied. All licensees must maintain records for three years.¹¹¹

The current CDA standard for recordkeeping is not the norm for private agricultural applicators. The U.S. Department of Agriculture (USDA) also regulates agricultural pesticide applicators and requires that Private Applicators maintain records of restricted use pesticide applications. Private Applicator licensing regulates agricultural applicators at the state government level. The USDA standard for recordkeeping is two years. Currently, EPA has proposed a recordkeeping requirement for Worker Protection Standard elements to be two years, matching the USDA requirement. This two-year standard represents a less restrictive regulatory environment than the three-year Act requirement and it still protects the public interest according to federal law.

¹¹⁰ § 35-10-117.5(b), C.R.S.

¹¹¹ § 35-10-111, C.R.S.

Therefore, the General Assembly should amend the Act to adopt the federal standard of two years for Private Applicator recordkeeping.

Recommendation 5 – Change “postmarked” to “received” in sections 107 and 116(5), of the Act.

The CDA is in the process of making the licensing process electronic. The Act states in sections 107 and 116(5) that licensure correspondence must be “postmarked” by a certain date. In an electronic system that word becomes obsolete. The Act should be changed so that the word “received” replaces the word postmarked.

Administrative Recommendation 1 – The CDA should develop an easily accessible, web-based complaint initiation process.

A concern continually brought to the attention of the Department of Regulatory Agencies (DORA) during this review, by both the regulated population and the general public, was that it is difficult to file a complaint with the CDA concerning alleged violations of the Act.

An investigation of the Pesticide Program website showed that there is no link that gives a person the option of making a complaint online. The only way to report an incident is to call one of two telephone numbers listed as an answer to, “Who can file a complaint?” on the “Enforcement Frequently Asked Questions” page. The page is difficult to find and the inability to file once the page is found makes the complaint system frustrating and not user-friendly. The difficulty navigating the website and system has provoked criticisms that the program administrators discourage complaints. DORA found no evidence that anyone associated with the program discouraged any individual from filing a complaint. However, the process needs to be upgraded and made more user-friendly.

A multitude of professional licensing programs in Colorado state government have an online, readily available prompt for making complaints. The technology to implement this type of program is both widely available and widely employed. One of the main purposes of regulation is to protect the public. A major element of public protection is the ability of any member of the public to report professional practice abuses to a regulating authority.

Therefore, the CDA should develop an easily accessible, web-based complaint initiation process.